# RABIES SUBMISSION GUIDE (From Epidemiology Policy and Procedure Manual pages 41-43)

### Rabies, Human

#### **Clinical description:**

Rabies is an acute encephalomyelitis that almost always progresses to coma or death within 10 days of the first symptom.

## Laboratory criteria for diagnosis:

- Detection by direct fluorescent antibody of viral antigens in a clinical specimen (preferably the brain or the nerves surrounding hair follicles in the nape of the neck), or
- Isolation (in cell culture or in a laboratory animal) of rabies virus from saliva, cerebrospinal fluid (CSF) or central nervous system tissue, or
- Identification of a rabies-neutralizing antibody titer  $\geq 5$  (complete neutralization) in the serum or CSF of an unvaccinated person.

#### **Case classification:**

**Confirmed:** A clinically compatible case that is laboratory confirmed

**Comment:** Laboratory confirmation by all of the above methods is strongly recommended.

- If the animal is to be tested at the MDH Lab:
  - 1. The animal must be **euthanized** and the head removed and sent to the MDH Lab. **Bats** may be sent whole **after being euthanized.**
  - 2. The animal head should be shipped in the yellow Rabies Shipper which contains a large leak-proof plastic bag for the head. The bag should then be placed inside the bag lining the shipping container. EXTREME CAUTION SHOULD BE TAKEN WHEN HANDLING SPECIMENS FOR RABIES TESTING. BE CAREFUL NOT TO COME IN CONTACT WITH ANY FLUID FROM THE ANIMAL.
  - 3. Add enough freezer packs to keep the specimen cold during transit. **DO NOT USE WET ICE.**
  - 4. DO NOT FREEZE ANIMAL HEADS; THIS DELAYS TESTING AS MUCH AS ONE DAY AND MAY DAMAGE THE BRAIN TISSUE.
  - 5. Complete the rabies lab slip and place it between the outer and inner lids of the yellow shipper. Make sure that the lab slip is filled out completely. It is important to note on the lab slip if an exposure has occurred (e.g. human exposure, animal exposure) so that results can be obtained as soon as possible. It

- takes at least 24 hours from the time the MDH Lab receives the specimen for a final result.
- **6.** The Office of the MDH Epidemiologist should be notified anytime an animal is being sent for rabies testing after a human or animal exposure.
- 7. The Public Health Environmentalist will assist with arranging for transportation of the animal head and shipping it to the MDH Lab. The Public Health Environmentalist is <u>not</u> responsible for removing animal heads. This should be arranged for by those reporting the animal exposure. Removal of an animal head suspected of rabies should be done by a veterinarian.